DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 26-28, 30-34, and 36-38 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 26-28 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brockway et al. 6866301 in view of Gundy 5738359.

4. Brockway et al. teaches a radially expanding joining member, comprising: an annular body portion defining a longitudinal axis including distal and proximal terminal edges, first and second side terminal edges (fig 4b); at least one annular array of openings (22) formed in the annular body; and at least one locking tab (26) extending tangentially form the first side terminal edge, each locking tab being in registration with a respective array of openings and receivable in the openings, wherein the joining member has a first position and a second position, wherein the at least one locking tab inhibits the annular body from returning to the first diameter by being received in an opening of the at least one array of openings (col. 4, line 50-col. 5, line 5); a pair of guide rails extending radially inward from an inner surface of the annular body portion,

at least one of the pair of guide rails being spaced a longitudinal distant from each of the proximal and distal terminal edges and extending circumferentially a substantial length of the at least one annular array of openings such that the at least one locking tab is slidably received between the pair of guide rails. It should be noted that Brockway fails to teach a guide channel formed near the first side terminal edge of the annular body.

5. Gundy teaches a device with a common guide channel for guiding a locking member during position changes (col. 4, lines 33-44). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Brockway in view of Gundy to help guide and retain the locking tab during adjustment or movement of the device.

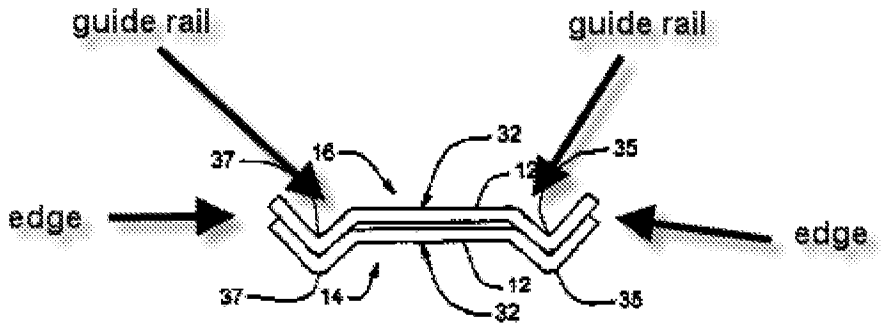


FIG. 4B

6. As to claims 27 and 28, Brockway/Gundy teaches the claimed invention except for two annular arrays and two tabs. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have two arrays and two tabs, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.,* 193 USPQ 8.

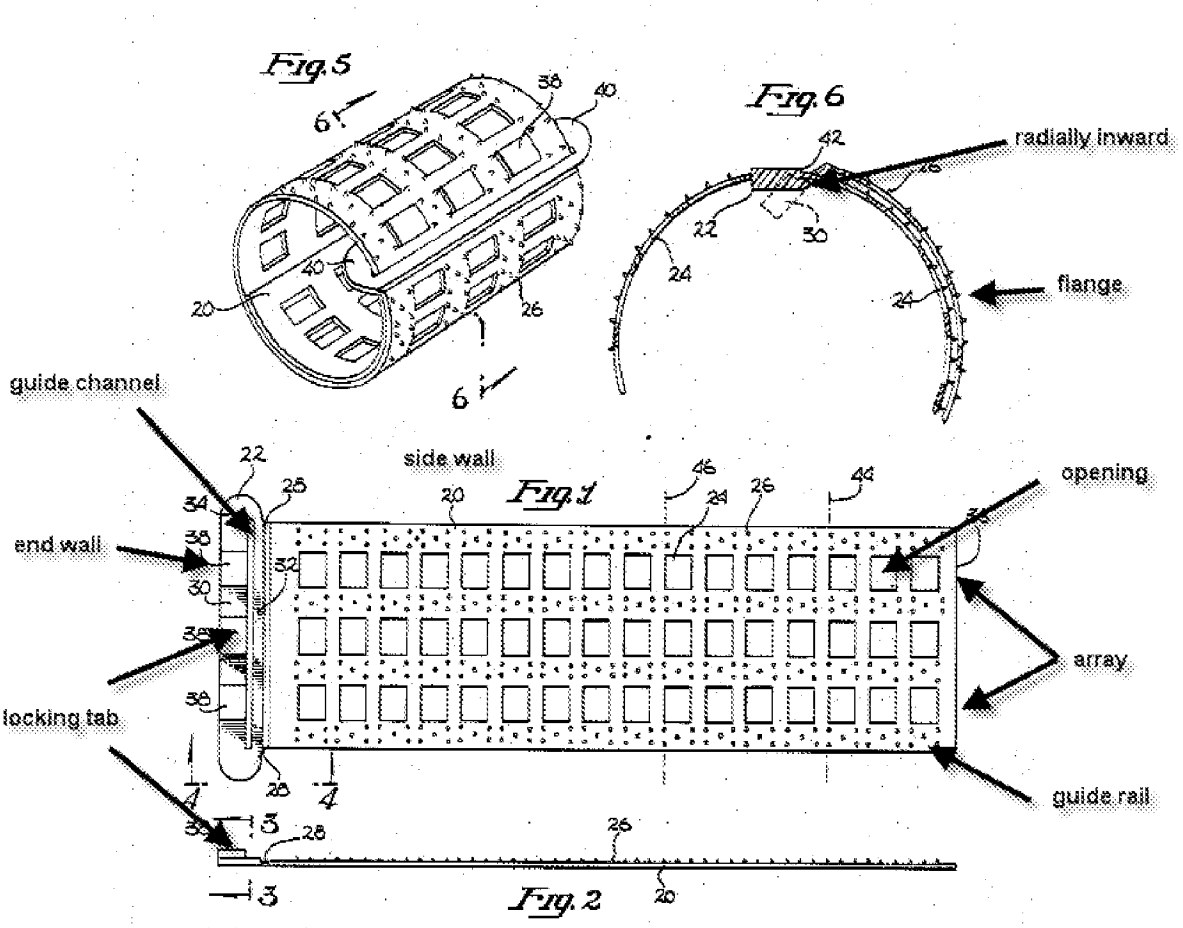
7. Claims 26-28 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Debue 3683940 in view of Brockway.

8. Debue teaches a radially expanding joining member, comprising: an annular body portion defining a longitudinal axis including distal and proximal terminal edges, first and second side terminal edges; a guide channel; at least one annular array of openings formed in the annular body; and at least one locking tab extending tangentially form the first side terminal edge, each locking tab being in registration with a respective array of openings and receivable in the openings, wherein the joining member has a first position and a second position, wherein the at least one locking tab inhibits the annular body from returning to the first diameter by being received in an opening of the at least one array of openings. It should be noted that Debue fails to teach a pair of guide rails extending radially inward from an inner surface of the annular body portion, at least one of the pair of guide rails being spaced a longitudinal distant from each of the proximal and distal terminal edges and extending circumferentially a substantial length of the at least one annular array of openings.

9. Brockway teaches a device with common guide rails (fig. 4b). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Debue in view of Brockway et al. to keep the distal and proximal terminal edges aligned within eachother for proper engagement of the locking tab with the openings.

10. Debue/Brockway teaches the joining member according to claim 26, including two annular arrays and two tabs extending tangentially from the first side edge; guide

rails formed, one each, along each side of the two annular arrays of openings; a guide channel formed near the second side terminal edge; wherein the guide channel is defined by a pair or side walls extending radially inwardly from the distal end proximal terminal edges; wherein the guide channel is further defined by an end wall interconnecting the terminal ends of the pair of side walls; and a plurality of flanges extending radially outward.



11. Claims 26-28, 33, 34, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan et al. 5984963 in view of Brockway et al.

12. Ryan et al. teaches a radially expandable joining member, comprising: an annular body portion defining a longitudinal axis including distal and proximal terminal edges, first and second side terminal edges; a guide channel (figs. 17, 18, &20-23); at least one annular array of openings formed in the annular body; and at least one locking tab extending tangentially and radially from the first side terminal edge (col. 8, lines 41-44), each locking tab being in registration with a respective array of openings and receivable in the openings; wherein the joining member has a first position and a second position (figs 13 & 14), wherein the at least one locking tab inhibits the annular body from returning to the first diameter by being received in an opening of the at least one array of openings (col. 11, lines 37-51);

13. It should be noted that Ryan et al. fails to teach a pair of guide rails extending radially inward from an inner surface of the annular body portion, at least one of the pair of guide rails being spaced a longitudinal distant from each of the proximal and distal terminal edges and extending circumferentially a substantial length of the at least one annular array of openings.

14. Brockway teaches a device with common guide rails (fig. 4b). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Ryan et al. in view of Brockway et al. to keep the distal and proximal terminal edges aligned within eachother for proper engagement of the locking tab with the openings

15. Ryan/Brockway teaches the joining member according to claim 33, wherein each of the openings of that at least one annular array of opening is defined by an

angled wall such that an upper edge of the angled wall is closer to the second side terminal edge than a lower edge of the angled wall (see openings of fig. 24); a pair of guide rails formed on an inner surface of the annular body (defined by outer edge and openings); and wherein the joining member is fabricated from a bio-absorbable material (see abstract).

16. Claims 37 and 38 rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan et al. in view of Brockway as applied to claim 33 above, and further in view of Khosravi et al. 6048360.

17. Ryan/Brockway teaches the joining member according to claim 33. It should be noted that Ryan/Brockway fails to teach wherein the joining member is fabricated from a shape member alloy. Ryan/Brockway teaches the use of a resilient polymer.

18. Khosravi et al. teaches of a polymer or an alloy that have shape memory characteristics (col. 6, lines 34-46). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device or Ryan/Brockway use an alloy in view of Khosravi et al. since an alloy is an obvious alternative to a polymer sharing the same characteristics.

19. Ryan/Brockway/Khosravi teaches the joining member according to claim 33, wherein the joining member includes a plurality of projection along an outer surface of the annular body portion (col. 10, lines 46-54).

Conclusion

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL G. MENDOZA whose telephone number is (571)272-4698. The examiner can normally be reached on Mon.-Fri. 9:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on (571) 272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. G. M./
Examiner, Art Unit 3734

/TODD E. MANAHAN/
Supervisory Patent Examiner, Art Unit 3734